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SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, owners and operators of all the following **Transport Category airplanes (Table 1) equipped with potable water systems and lavatory fill and drain systems** of a risk of potential airplane damage and injury to persons and property on the ground associated with inadequate maintenance of the potable water systems and lavatory fill and waste drain systems.

TABLE 1

MAKE	MODEL
Airbus	A300, A310, A318, A319, A320, A321, A330, A340
BBJ (Boeing Business Jets)	All
Boeing	707, 717, 727, 737, 747, 757, 767, 777
BAE Systems	BAe 146
British Aerospace	BAC-1-11
Airbus	
Fokker	F.28
Lockheed	L1011
McDonnell Douglas Corporation	DC-8, DC-9, DC-10, MD-10, MD-11, MD- 80, MD-88, MD-90

Background

We have received numerous reports of damage to airplanes and to property on the ground caused by blue or clear ice falling from airplanes. While in the majority of cases it is not possible to identify the offending airplane,

we believe that the ice came from toilet or water system servicing points on the airplane. The United Kingdom Civil Aviation Authority issued Airworthiness Notice No. 12, Appendix 66, Issue 1 dated October 23, 2003 to address these hazards. We have included the content of that Airworthiness Notice in this SAIB.

Recommendations

While toilet and water system details vary between aircraft types, the operating concepts and philosophies are similar. Operators, maintenance, and ground handling organizations should bear the following points in mind:

- You should ensure that contracted ground handling company's personnel who provide toilet and water system servicing to the aircraft are fully aware of the reasons for and potential hazards associated with blue or clear ice. These companies should provide their personnel with instruction in Aircraft Maintenance Manual procedures for toilet and water system servicing. The ground handling company should continue training programs to ensure their employees revisit these aspects when required. The company should advise their ground handling personnel of the need to report leakage, damage or any servicing difficulties to maintenance personnel for corrective action. Do not delay investigating and rectifying reports of inoperative toilet flush and water systems especially where the fluid charge is being lost.

- Galley and toilet sinks that do not drain in flight are often an indication of a failed drain mast heater and therefore another possible source of ice accumulation.
- You should ensure that the aircraft maintenance program contains all the manufacturer's recommendations for the maintenance of such systems.
- Operator and maintenance organization's *quality departments* should include inspection of toilet and water system servicing points for evidence of leakage and satisfactory condition of sealing arrangements in aircraft audit programs.
- If you find leaks prior to flight that cannot be rectified, you should drain the system and placard the toilet INOPERATIVE and make reference in the aircraft's MEL.
- If you find dents or damage to engine intake lips, compressor blades, stabilizer leading edges etc., with no apparent reason for such damage, you should consider the detachment of ice from toilet or water system servicing points forward as a cause.
- If you find evidence of blue streaking or staining from toilet servicing panels with no apparent leaks, your servicing procedures may be inadequate.
- While you must comply with all Airworthiness Directives applicable to such systems, you should carefully assess **all non mandatory service bulletins** and modifications for application to such systems.
- You should maintain toilet and water system servicing point sealing systems at all times and they should receive the same level of attention as afforded to any other aircraft systems.
- Items such as soap dispensers and disposable diapers being placed in toilets and becoming lodged under the toilet dump valve assembly has caused leakage from otherwise fully serviceable toilet systems. You should maintain placards located adjacent to the toilet listing prohibited items and these placards should be legible at all times.
- You should keep toilet systems servicing panel areas clean and free of staining to assist early detection of leaks.
- You should consider implementing a cleaning program for toilet servicing panel areas to assist the prompt detection of leaks.

For Further Information Contact

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